

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF RATES OF THE WEST	)	CASE NO.
SHELBY WATER DISTRICT	)	91-367

O R D E R

On October 15, 1991, West Shelby Water District ("West Shelby") filed its application for Commission approval of a proposed increase in its rates for water service. Commission Staff, having performed a limited financial review of West Shelby's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 15 days from the date of this order.

IT IS THEREFORE ORDERED that all parties shall have 15 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is received, then this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 31st day of March, 1992.

PUBLIC SERVICE COMMISSION

  
\_\_\_\_\_  
For the Commission

ATTEST:

  
\_\_\_\_\_  
Executive Director

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

IN THE MATTER OF ADJUSTMENT	)	
OF RATES OF THE WEST SHELBY	)	CASE NO. 91-367
WATER DISTRICT	)	

STAFF REPORT

March 23, 1992

Prepared By: Karen Harrod  
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STAFF REPORT

ON

WEST SHELBY WATER DISTRICT

CASE NO. 91-367

A. Preface

On October 15, 1991, West Shelby Water District ("West Shelby") submitted an application to the Commission seeking approval to increase its water rates. The application was considered filed on October 25, 1991. The proposed rates were designed to generate \$56,475 in additional revenues, an increase of 17 percent over normalized test-year revenues of \$330,750.

In order to evaluate the requested increase, the Commission Staff ("Staff") chose to perform a limited financial review of West Shelby's operations for the test period, fiscal year ended August 31, 1991. Karen Harrod of the Commission's Division of Rates and Tariffs conducted the review on November 25, 1991 at West Shelby's office in Simpsonville, Kentucky. John Geoghegan of the Research Division, performed his review of the billing analysis at the Commission's office in Frankfort, Kentucky.

The findings of Staff's review have been reduced to writing in this report. Mr. Geoghegan is responsible for the sections related to operating revenues and rate design. The remaining sections of the Staff Report were prepared by Mrs. Harrod.

During the course of the review West Shelby was advised that all proposed adjustments to test-year operations must be supported by some form of documentation, such as an invoice, and that all

such adjustments must be known and measurable. Based on the findings of this report, Staff recommends that West Shelby be authorized to increase its annual operating revenues by \$56,475.

### Scope

In Exhibit 9 of the application West Shelby submitted financial statements that indicated its proposed test-year to be the 12-month period ended August 31, 1991. However, in Exhibit 8, the pro-forma adjustments and requested increase were calculated based on the 12-month period ended December 31, 1990. Staff consulted with West Shelby to verify which test period to use. According to West Shelby's engineer, the billing analysis was prepared based on the August 31, 1991 test year. Therefore, the intention was to use the fiscal year ended August 31, 1991 as the test period in this proceeding.

The scope of the review was limited to obtaining information to determine whether test-period operating revenues and expenses were representative of normal operations. It should be noted that West Shelby did not file a consolidated 12-month financial statement for the test period in its application. Therefore, Staff attempted to combine the revenues and expenses reported for September - December 1990 with those reported for January - August 1991. Because of a change in West Shelby's accounting system that took place in January 1991, the accounts did not readily match up for the two calendar years. As a result of these differences and because Staff did not conduct an actual audit of West Shelby's test year records, some of the test year balances may be misstated. The adjustments recommended by Staff in this report

have primarily been made to reflect the current level of expenditures in the various expense accounts.

In addition, Staff has evaluated and made recommendations with regard to the pro-forma adjustments proposed in West Shelby's application. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

#### B. Revenue Requirements Determination

##### Operating Revenues

Based on the revenues from water sales that were reported on West Shelby's monthly financial statements during the test period, its test year revenue is \$336,764. West Shelby provided a billing analysis of the present billing of customers that indicates its actual test year revenue is \$330,750. Staff accepts the billing analysis as submitted and therefore recommends an adjustment to operating revenue of \$6,014.

##### Salary Expense

Staff calculated West Shelby's test-period salary expense to be \$58,702. Based on the current salary levels of West Shelby's three employees an adjustment has been made to increase this amount to a level of \$59,640. Accordingly, Staff has made an adjustment to increase salary expense by \$938.

##### Purchased Water Expense

Test year purchased water expense has been calculated by Staff to be \$157,409. An adjustment was made to decrease this amount by \$7,626 to reflect the normalized purchased water expense of \$149,783, calculated as follows:

Normalized Test-Period Usage	115,465,700 gallons
Adjustment for 13% Line Loss per 1990 Annual Report <sup>1</sup>	• .87
	<u>132,719,195 gallons</u>
Water Used by Company per 1990 Annual Report	471,030 gallons
Recommended Usage	<u>133,190,225 gallons</u>

Based on the test period, West Shelby purchases 38.1% of its water from Louisville Water Company, 61.6% from Shelbyville Water and Sewer Commission, and .3% from North Shelby Water Company. The current rates per 1,000 gallons from each of these utilities are \$1.25, \$1.00 and \$2.66, respectively. In addition, West Shelby is charged a monthly service charge of \$101.10 by Louisville Water Company. Based on this information, Staff has calculated purchased water expense as follows:

	Gallons	Amount
Louisville Water Company	50,745,476	\$ 65,462
Shelbyville Water & Sewer	82,045,179	82,045
North Shelby Water Company	399,570	1,063
Total	<u>133,190,225</u>	<u>\$148,570</u>
Monthly Service Charge - LWC		1,213
Recommended Purchased Water Expense		<u>\$149,783</u>

#### Director Fees

For the test year West Shelby incurred Director Fees expenses of \$12,900. West Shelby currently has 3 commissioners that are each paid \$300 per month. Accordingly, Staff recommends an

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<sup>1</sup> 1990 Line Loss of 13% was the last known percentage of West Shelby's line loss at the time of the review. West Shelby's line loss has gradually increased by a total of 7.6% since 1986. However, the 13% is still below the 15% level generally allowed by the Commission.

adjustment be made to decrease test year expense by \$2,100, to the current level of \$10,800.

#### Insurance Expense

Staff has determined West Shelby's test-year insurance expense to be \$7,929. Based on Staff's review, the current level of expense for worker's compensation and property and casualty insurance is \$6,548. As a result, Staff has included an adjustment to decrease test-year expense by \$1,381.

#### Taxes Other than Income

Based on the records reviewed by Staff, West Shelby incurred test-period tax expenses of \$5,814. An adjustment has been made to allow for payroll taxes associated with the aforementioned salary increase. Therefore, Staff has included an increase to test year payroll tax expense of \$72.<sup>2</sup>

#### Rent Expense

For the test year West Shelby incurred rent expense of \$3,921 for the rental of its office space and various equipment used throughout the year. Subsequent to the test period, in December 1991, the cost of renting office space increased from \$325 per month to \$340 per month. Accordingly, Staff has included an adjustment for \$180<sup>3</sup> to reflect the current level of expense.

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2	Salary Increase	\$ 938
	FICA Rate	x 7.65%
	Recommended Increase	<u>\$ 49</u>

3      $(\$340 - \$325) \times 12 \text{ mos.} = \underline{\underline{\$180}}$

### Contractual Services - Accounting

West Shelby reported test-year expenses for accounting services in the amount of \$8,375. Based on Staff's review, West Shelby currently pays its accountant \$200 per month for bookkeeping services. During the test year West Shelby was also billed \$4,575 for financial audit services and the preparation of its annual report. Based on these findings, Staff has calculated the annualized accounting services expense to be \$6,975, a decrease of \$1,400 from the test year level.

### Employee Benefits

For the test period, Staff determined that West Shelby incurred employee benefits expense of \$6,415. Based on the increased level of salary expense an adjustment has been made to increase the associated retirement contribution made by the employer. Accordingly, an increase of \$75<sup>4</sup> has been included for rate-making purposes.

During the test year West Shelby provided health insurance benefits for one of its employees at a total cost of \$1,512. Subsequent to that time, in October 1991, West Shelby began incurring the expense of providing insurance coverage for each of its three employees. Based on a current monthly insurance premium of \$325.20, this results in an annual expense of \$3,902, an increase of \$2,390 over the test-year level.

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4	Salary Increase	\$ 938
	Retirement Contribution Rate	x 7.95%
	Recommended Increase	<u>\$ 75</u>



Based on the aforementioned adjustments, Staff recommends a net increase to test-year insurance expense of \$2,465.

#### Rate Case Expense

In its application West Shelby proposed to include the amortization of rate case expense of \$8,000 over a period of three years. Based on Staff's review, the actual invoice was in the amount of \$7,663. The Commission generally allows a three-year amortization of rate case expenses. Therefore, Staff has included an adjustment to reflect annual rate case expense of \$2,554.<sup>5</sup>

#### Tank Painting Expense

West Shelby proposed an adjustment in its application to include the three year amortization of tank painting expense estimated to be \$27,000. Staff has reviewed the estimate submitted by West Shelby's engineer in support of the cost of \$27,000. However, after consulting with the Commission's Engineering Division, Staff has determined that it would be more appropriate to amortize this expense over a period of seven years. Accordingly, Staff has included tank painting expense of \$3,857<sup>6</sup> in the determination of West Shelby's revenue requirement.

#### Depreciation Expense

In its application West Shelby included an adjustment for the 3-year depreciation of a service truck that has not yet been

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<sup>5</sup>  $\$7,663 + 3 \text{ yrs.} = \underline{\underline{\$2,554}}$

<sup>6</sup>  $\$27,000 + 7 \text{ yrs.} = \underline{\underline{\$3,857}}$

purchased and is estimated to cost \$15,000. Staff has reviewed estimates for the purchase of the truck and has determined that the \$15,000 reflects an average of those three estimates. Staff is of the opinion that the average cost is a reasonable basis to use. However, the Commission Engineering Division recommends a service life of five years. Therefore, Staff has included an adjustment to increase test year depreciation expense by \$3,000.

### Operations Summary

Based on the recommendations of Staff contained in this report, West Shelby's operating statement would appear as follows:

	<u>Test Year Actual</u>	<u>Recommended Adjustments</u>	<u>Test Year Adjusted</u>
Operating Revenues:			
Sales of Water	\$336,764	\$( 6,014)	\$330,750
Private Fire Protection	14,854		14,854
Other Operating Revenues	12,048		12,048
Total Operating Revenues	<u>\$363,666</u>	<u>\$( 6,014)</u>	<u>\$357,652</u>
Operating Expenses:			
Salary Expense	\$ 58,702	\$ 938	\$ 59,640
Purchased Water Expense	157,409	(7,626)	149,783
Director Fees	12,900	(2,100)	10,800
Insurance	7,929	(1,381)	6,548
Transportation Expense	2,759		2,795
Utilities	2,502		2,502
Taxes Other than Income	5,814	72	5,886
Rent Expense	3,921	180	4,101
Contr. Services-Accounting	8,375	(1,400)	6,975
Contr. Services-Legal	3,011		3,011
Contr. Services-Eng.	450		450
Employee Benefits	6,415	2,465	8,880
Office Supplies & Expenses	2,974		2,974
Maint.-General Properties	1,445		1,445
Miscellaneous Expense	2,420		2,420
Purchased Power	4,765		4,765
Maintenance Expense	1,854		1,854
Operation Supplies	1,613		1,613
Rate Case Expense	-0-	2,554	2,554
Tank Painting Expense	-0-	3,857	3,857
Depreciation Expense	<u>50,849</u>	<u>3,000</u>	<u>53,849</u>
Total Operating Expenses	<u>\$336,107</u>	<u>\$ 559</u>	<u>\$336,666</u>

Operating Income	\$ 27,559	\$( 6,573)	\$ 20,986
Interest Income	<u>13,027</u>	<u>          </u>	<u>13,027</u>
Inc. Available for Debt Service	<u>\$ 40,586</u>	<u>\$( 6,573)</u>	<u>\$ 34,013</u>

C. Revenue Requirements Determination

In the calculation of West Shelby's revenue requirement Staff has included the average annual debt service required to repay an outstanding bond debt to the Louisville Water Company. These bonds originated in 1988 as payment for the installation of a water main extension, constructed by Louisville Water Company, to provide treated water to West Shelby. The repayment plan was included as part of a contract between the two parties that was approved by the Commission in June 1988. The remaining principal amount due of \$191,453 is to be paid in monthly payments at an interest rate of 8.27% over a period of 30 years. Staff has calculated the average annual principal and interest payments to be \$17,374. This annual payment has been included as a component of West Shelby's revenue requirement.

West Shelby also has outstanding debt with the Farmer's Home Administration. Staff has calculated West Shelby's average annual principal and interest payments associated with that debt to be \$85,563. Based on the adjusted test-period operations, West Shelby's debt service coverage ("DSC") is .4x.<sup>7</sup> West Shelby's proposed increase in revenues of \$56,476 would generate a debt

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<sup>7</sup>  $\$34,013 \div \$85,563 = .4.$

service coverage of  $1.06x^8$  and a net cash flow of \$41,401<sup>9</sup> which is sufficient to meet its actual debt service requirements.

Generally, Staff would recommend a debt service coverage of 1.2x to determine the fair, just, and reasonable level of revenue required for a water district. However, given the problems surrounding West Shelby's test year numbers that were discussed in the Scope Section of this report, it is Staff's opinion that the requested increase would be fair and reasonable in this instance. Therefore, Staff recommends that the proposed increase of \$56,476 be accepted.

Staff advises West Shelby to closely monitor its financial position and, should the rates recommended herein become insufficient to meet the operating expenses and debt service requirements of West Shelby, to take appropriate measures to alleviate the revenue shortfall.

#### D. Rate Design

In its application, West Shelby did not propose to change its current rate design. Staff is of the opinion that its current

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<sup>8</sup>  $(\$ 34,013 + \$56,476) + \$85,563 = 1.06.$

<sup>9</sup> Adjusted Operations	\$ 34,013
Add: Proposed Revenue Increase	56,476
Depreciation Expense	53,849
	<u>\$144,338</u>
Less: Avg. Annual Principal & Interest - LWC	17,374
Avg. Annual Principal & Interest - FHA	<u>85,563</u>
Net Cash Flow	<u>\$ 41,401</u>

rate design is reasonable and need not be altered. The rates set out in the Appendix to this report will generate annual revenue of approximately \$387,226.

E. Signatures



Prepared By: Karen Harrod  
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Analyst, Chief  
Water and Sewer Revenue  
Requirements Branch  
Rates and Tariffs Division



Prepared By: John Geoghegan  
Public Utility Rate  
Analyst, Principal  
Communications, Water and  
Sewer Rate Design Branch  
Research Division

APPENDIX A  
TO STAFF REPORT CASE NO. 91-367

The Staff recommends the following rates be prescribed for customers of West Shelby Water District.

5/8 x 3/4 Inch Meters

First	2,500 gallons	\$10.91 (Minimum Bill)
Next	7,500 gallons	3.77 per 1,000 gallons
Next	20,000 gallons	3.19 per 1,000 gallons
Next	200,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

3/4 Inch Meters

First	3,500 gallons	\$14.68 (Minimum Bill)
Next	6,500 gallons	3.77 per 1,000 gallons
Next	20,000 gallons	3.19 per 1,000 gallons
Next	200,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

1 Inch Meters

First	5,000 gallons	\$20.33 (Minimum Bill)
Next	5,000 gallons	3.77 per 1,000 gallons
Next	20,000 gallons	3.19 per 1,000 gallons
Next	200,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

1 1/2 Inch Meters

First	10,000 gallons	\$39.18 (Minimum Bill)
Next	20,000 gallons	3.19 per 1,000 gallons
Next	200,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

2 Inch Meters

First	16,000 gallons	\$58.32 (Minimum Bill)
Next	14,000 gallons	3.19 per 1,000 gallons
Next	200,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

3 Inch Meters

First	30,000 gallons	\$102.98 (Minimum Bill)
Next	200,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

4 Inch Meters

First	50,000 gallons	\$148.38 (Minimum Bill)
Next	180,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons

6 Inch Meters

First	100,000 gallons	\$284.38 (Minimum Bill)
Next	130,000 gallons	2.72 per 1,000 gallons
Over	230,000 gallons	2.38 per 1,000 gallons